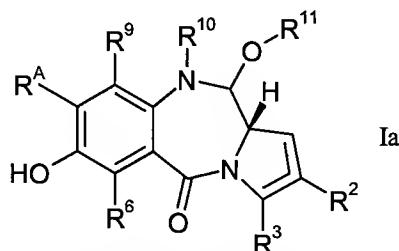


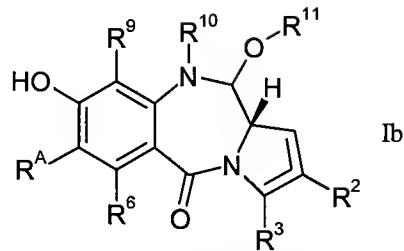
**Amendments to the Claims:**

**Listing of Claims:**

1. (Currently amended) A compound of formula **Ia** or **Ib**:



Ia



Ib

and or pharmaceutically acceptable salts[[,]] or solvates, and chemically protected forms thereof, wherein:

the dotted lines indicate the optional presence of a double bond between C1 and C2 or C2 and C3;

R<sup>2</sup> and R<sup>3</sup> are independently selected from -H, =O, =CH<sub>2</sub>, -CN, -R, OR, halo, =CH-R, O-SO<sub>2</sub>-R, CO<sub>2</sub>R and COR;

R<sup>6</sup> and R<sup>9</sup> are independently selected from H, R, OH, OR, SH, SR, NH<sub>2</sub>, NHR, NRR', nitro, Me<sub>3</sub>Sn and halo;

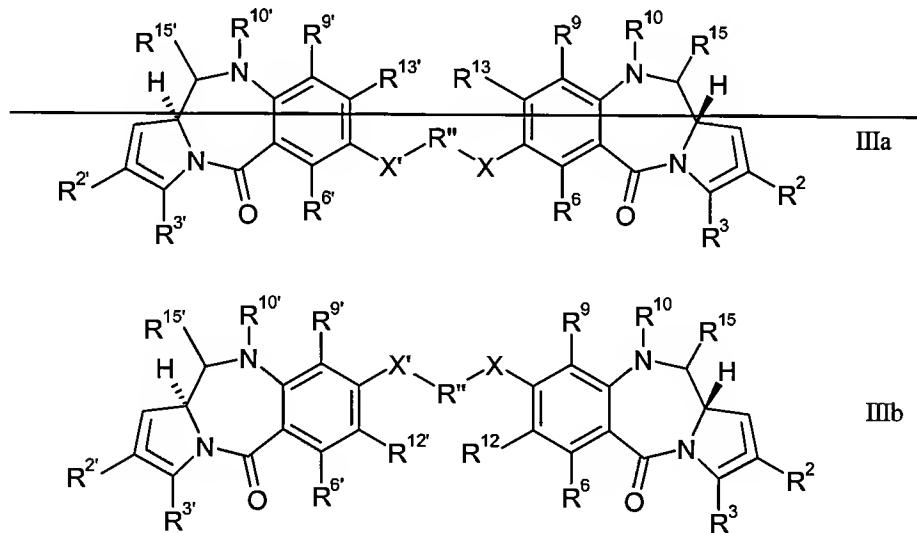
where R and R' are independently selected from optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-20</sub> heterocycl<sub>l</sub> groups having 3 to 20 ring atoms of which 1 to 10 are heteroatoms independently selected from the group consisting of N, O and S and C<sub>5-20</sub>-aryl or heteroaryl groups having 5 to 20 ring atoms, the heteroaryl groups having one or more heteroatoms independently selected from the group consisting of N, O and S, wherein the optional substituents are independently selected from halo, hydroxy, ether, alkoxy, acetal, hemiacetal, ketal, hemiketal, oxo, thione, imino, formyl, acyl, carboxy, thiocarboxy, thiolcarboxy, thionocarboxy, imidic acid, hydroxamic acid, ester, acyloxy, oxycaroyloxy, amino, amido, thioamido, acylamido, aminocaronyloxy, ureido, guanidino, tetrazolyl, amidino, nitro, nitroso, azido, cyano, isocyano, cyanato, isocyanato, thiocyanato, isothiocyanato, sulfhydryl, disulfide, sulfine, sulfonyl, sulfino, sulfo, sulfinate, sulfonate, sulfinyloxy, sulfonyloxy, sulfate, sulfamyl, sulfonamido, sulfamino, sulfonamino, sulfinamino, phosphino, phosphor, phosphinyl, phosphono, phosphonate, phosphonoxy, phosphate, phosphorous acid, phosphite, phosphoramidite, or phosphoramidate;

R<sup>A</sup> is selected from H, R, OR, SH, SR, NH<sub>2</sub>, NHR, NRR', nitro, Me<sub>3</sub>Sn and halo;

$R^{10}$  is a carbamate-based nitrogen protecting group; and

$R^{11}$  is an oxygen protecting group.

2. (Original) A compound according to claim 1, wherein  $R^A$  is independently selected from H, OR, SH, SR,  $NH_2$ ,  $NHR$ ,  $NRR'$  and halo.
3. (Previously presented) A compound according to claim 1, wherein  $R^{11}$  is THP or a silyl oxygen protecting group.
4. (Previously presented) A compound according to claim 1, wherein  $R^{10}$  is BOC or Troc.
5. (Previously presented) A compound according to claim 1, wherein  $R^9$  is H.
6. (Previously presented) A compound according to claim 1, wherein  $R^2$  is R.
7. (Previously presented) A compound according to claim 1, wherein  $R^6$  is selected from H, OH, OR, SH,  $NH_2$ , nitro and halo.
8. (Currently amended) A compound of formula **IIIa** or **IIIb**:



and or pharmaceutically acceptable salts or solvates and thereof, wherein:

the dotted lines indicate the optional presence of a double bond between C1 and C2 or C2 and C3;

$R^2$  and  $R^3$  are independently selected from  $-H$ ,  $=O$ ,  $=CH_2$ ,  $-CN$ ,  $-R$ ,  $OR$ , halo,  $=CH-R$ ,  $O-SO_2-R$ ,  $CO_2R$  and  $COR$ ;

$R^6$ ,  $R^9$ ,  $R^{12}$  and  $R^{13}$  are independently selected from  $H$ ,  $R$ ,  $OH$ ,  $OR$ ,  $SH$ ,  $SR$ ,  $NH_2$ ,  $NHR$ ,  $NRR'$ , nitro,  $Me_3Sn$  and halo;

where  $R$  and  $R'$  are independently selected from optionally substituted  $C_{1-12}$  alkyl,  $C_{3-20}$  heterocycl groups having 3 to 20 ring atoms of which 1 to 10 are heteroatoms independently selected from the group consisting of  $N$ ,  $O$  and  $S$  and  $C_{5-20}$ -aryl or heteroaryl groups having 5 to 20 ring atoms, the heteroaryl groups having one or more heteroatoms independently selected from the group consisting of  $N$ ,  $O$  and  $S$ , wherein the optional substituents are independently selected from halo, hydroxy, ether, alkoxy, acetal, hemiacetal, ketal, hemiketal, oxo, thione, imino, formyl, acyl, carboxy, thiocarboxy, thiolcarboxy, thionocarboxy, imidic acid, hydroxamic acid, ester, acyloxy, oxycaroyloxy, amino, amido, thioamido, acylamido, aminocaronyloxy, ureido, quanidino, tetrazolyl, amidino, nitro, nitroso, azido, cyano, isocyano, cyanato, isocyanato, thiocyanato, isothiocyanato, sulfhydryl, disulfide, sulfine, sulfonyl, sulfino, sulfo, sulfinate, sulfonate, sulfinyloxy, sulfonyloxy, sulfate, sulfamyl, sulfonamido, sulfamino, sulfonamino, sulfinamino, phosphino, phosphor, phosphinyl, phosphono, phosphonate, phosphonooxy, phosphate, phosphorous acid, phosphite, phosphoramidite, or phosphoramidate;

$R^{10}$  is a carbamate-based nitrogen protecting group and  $R^{15}$  is either  $O-R^{11}$ , wherein  $R^{11}$  is an oxygen protecting group, or  $OH$ , or  $R^{10}$  and  $R^{15}$  together form a double bond between N10 and C11; and

where  $-X'-R''-X-$  is  $-O-(CH_2)_n-O-$ , where  $n$  is 8 to 12;  $R''$  is a  $C_{3-12}$  alkylene group, which chain may be interrupted by one or more heteroatoms, e.g.  $O$ ,  $S$ ,  $NH$ , and/or aromatic rings, and each  $X$  is independently selected from  $O$ ,  $S$ , or  $NH$ ; and

$R^2$ ,  $R^3$ ,  $R^6$ ,  $R^9$ ,  $R^{10}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{15}$  are all independently selected from the same lists as previously defined for  $R^2$ ,  $R^3$ ,  $R^6$ ,  $R^9$ ,  $R^{10}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{15}$  respectively.

9. Canceled.

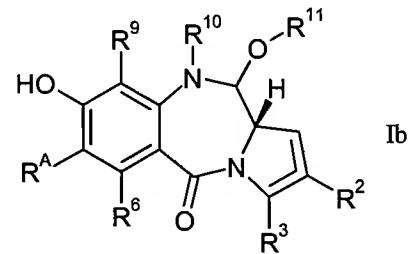
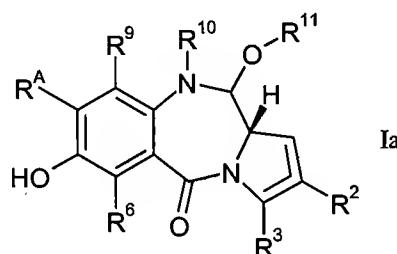
10. Canceled.

11. Canceled.

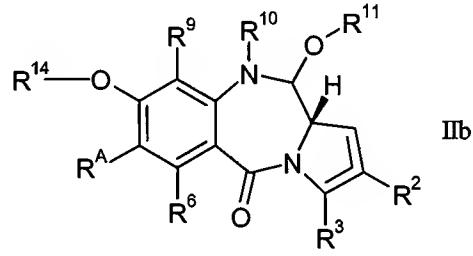
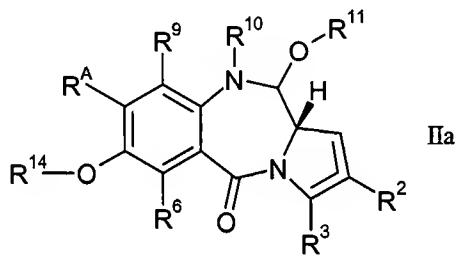
12. Canceled.
13. (Currently amended) A compound according to claim 8 12, wherein n is 8 to 11.
14. (Original) A compound according to claim 13, wherein n is 8 to 10.
15. (Original) A compound according to claim 14, wherein n is 8 or 9.
16. (Previously presented) A compound according to claim 8, wherein R<sup>15</sup> is O-R<sup>11</sup> and R<sup>11</sup> is THP or a silyl oxygen protecting group.
17. (Previously presented) A compound according to claim 8, wherein R<sup>10</sup> is BOC or Troc.
18. (Previously presented) A compound according to claim 8, wherein R<sup>10</sup> and R<sup>15</sup> together form a double bond between N10 and C11.
19. (Previously presented) A compound according to claim 8, wherein R<sup>9</sup> is H.
20. (Previously presented) A compound according to claim 8, wherein R<sup>2</sup> is R.
21. (Previously presented) A compound according to claim 8, wherein R<sup>6</sup> is selected from H, OH, OR, SH, NH<sub>2</sub>, nitro and halo.
22. (Canceled)
23. (Previously presented) A pharmaceutical composition containing a compound of claim 8, and a pharmaceutically acceptable carrier or diluent.
24. (Canceled)
25. (Currently amended) A method of treatment of a proliferative disease, comprising administering to a subject in need of treatment a therapeutically-effective amount of a

compound of claim 8, wherein the proliferative disease is selected from leukemia, melanoma, lung cancer, renal cancer, colon cancer, CNS cancer, and ovarian cancer.

26. (Currently amended) A method of synthesising a compound of formula **Ia** or **Ib**:



from a compound of formula **IIa** or **IIb** respectively:



comprising removing R<sub>14</sub>,

wherein:

the dotted lines indicate the optional presence of a double bond between C1 and C2 or C2 and C3;

R<sup>2</sup> and R<sup>3</sup> are independently selected from -H, =O, =CH<sub>2</sub>, -CN, -R, OR, halo, =CH-R, O-SO<sub>2</sub>-R, CO<sub>2</sub>R and COR;

R<sup>6</sup> and R<sup>9</sup> are independently selected from H, R, OH, OR, SH, SR, NH<sub>2</sub>, NHR, NRR', nitro, Me<sub>3</sub>Sn and halo;

where R and R' are independently selected from optionally substituted C<sub>1-12</sub> alkyl, -C<sub>3-20</sub> heterocycl groups having 3 to 20 ring atoms of which 1 to 10 are heteroatoms independently selected from the group consisting of N, O and S and C<sub>5-20</sub>-aryl or heteroaryl groups having 5 to 20 ring atoms, the heteroaryl groups having one or more heteroatoms independently selected from the group consisting of N, O and S, wherein the optional substituents are independently selected from halo, hydroxy, ether, alkoxy, acetal, hemiacetal, ketal, hemiketal, oxo, thione, imino, formyl, acyl, carboxy, thiocarboxy, thiolcarboxy, thionocarboxy, imidic acid, hydroxamic acid, ester, acyloxy, oxycaryoxy, amino, amido, thioamido, acylamido, aminocaryoxy.

ureido, quanidino, tetrazolyl, amidino, nitro, nitroso, azido, cyano, isocyano, cyanato, isocyanato, thiocyanato, isothiocyanato, sulfhydryl, disulfide, sulfine, sulfonyl, sulfino, sulfo, sulfinate, sulfonate, sulfinyloxy, sulfonyloxy, sulfate, sulfamyl, sulfonamido, sulfamino, sulfonamino, sulfinamino, phosphino, phosphor, phosphinyl, phosphono, phosphonate, phosphonooxy, phosphate, phosphorous acid, phosphite, phosphoramidite, or phosphoramidate;

$R^A$  is selected from H, R, OR, SH, SR,  $NH_2$ , NHR, NRR', nitro,  $Me_3Sn$  and halo;

$R^{10}$  is a carbamate-based nitrogen protecting group;

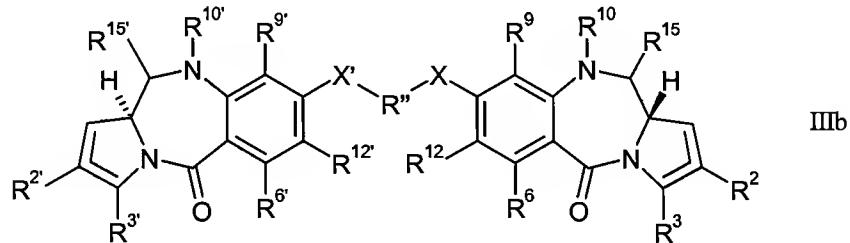
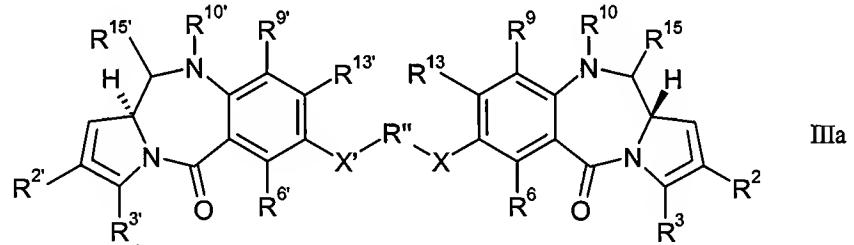
$R^{11}$  is an oxygen protecting group; and

$R^{14}$  is an oxygen protecting group orthogonal to  $R^{11}$ .

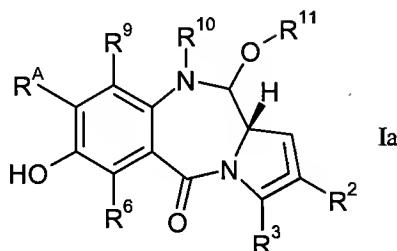
27. (Original) A method according to claim 26, wherein  $R^{14}$  is benzyl ether and  $R^A$  is OMe or H.

28. (Previously presented) A method according to claim 26, wherein R<sup>11</sup> is THP or a silyl oxygen protecting group.

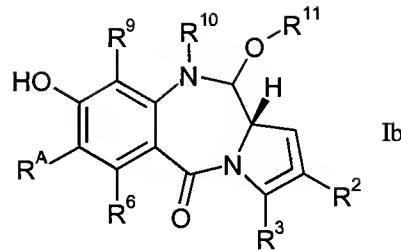
29. (Currently amended) A method of synthesising a compound of formula **IIIa** or **IIIb**:



or a solvate thereof, from a compound of formula **Ia** or **Ib** respectively:



Ia



Ib

wherein:

the dotted lines indicate the optional presence of a double bond between C1 and C2 or C2 and C3;

R<sup>2</sup> and R<sup>3</sup> are independently selected from -H, =O, =CH<sub>2</sub>, -CN, -R, OR, halo, =CH-R, O-SO<sub>2</sub>-R, CO<sub>2</sub>R and COR;

R<sup>6</sup>, R<sup>9</sup>, R<sup>12</sup> and R<sup>13</sup> are independently selected from H, R, OH, OR, SH, SR, NH<sub>2</sub>, NHR, NRR', nitro, Me<sub>3</sub>Sn and halo; where R and R' are independently selected from optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-20</sub>-heterocyclyl groups having 3 to 20 ring atoms of which 1 to 10 are heteroatoms independently selected from the group consisting of N, O and S and C<sub>5-20</sub>-aryl or heteroaryl groups having 5 to 20 ring atoms, the heteroaryl groups having one or more heteroatoms independently selected from the group consisting of N, O and S, wherein the optional substituents are independently selected from halo, hydroxy, ether, alkoxy, acetal, hemiacetal, ketal, hemiketal, oxo, thione, imino, formyl, acyl, carboxy, thiocarboxy, thiolcarboxy, thionocarboxy, imidic acid, hydroxamic acid, ester, acyloxy, oxycaroyloxy, amino, amido, thioamido, acylamido, aminocaronyloxy, ureido, guanidino, tetrazolyl, amidino, nitro, nitroso, azido, cyano, isocyano, cyanato, isocyanato, thiocyanato, isothiocyanato, sulfhydryl, disulfide, sulfine, sulfonyl, sulfino, sulfo, sulfinate, sulfonate, sulfinyloxy, sulfonyloxy, sulfate, sulfamyl, sulfonamido, sulfamino, sulfonamino, sulfinamino, phosphino, phosphor, phosphinyl, phosphono, phosphonate, phosphonoxy, phosphate, phosphorous acid, phosphite, phosphoramidite, or phosphoramidate;

R<sup>A</sup> is selected from H, R, OR, SH, SR, NH<sub>2</sub>, NHR, NRR', nitro, Me<sub>3</sub>Sn and halo;

R<sup>10</sup> is a carbamate-based nitrogen protecting group and R<sup>15</sup> is either O-R<sup>11</sup>, wherein R<sup>11</sup> is an oxygen protecting group, or OH, or R<sup>10</sup> and R<sup>15</sup> together form a double bond between N10 and C11; and

where R" is a C<sub>3-12</sub> alkylene group, and each X is independently selected from O, S, or NH; and R<sup>2</sup>, R<sup>3</sup>, R<sup>6</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>15</sup> are all independently selected from the same lists as previously defined for R<sup>2</sup>, R<sup>3</sup>, R<sup>6</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>15</sup> respectively, comprising either:

(a) reacting a compound of formula **Ia** or **Ib** with a compound having the formula Y-R"-Y' to yield a compound of formula **IIIa** or **IIIb**; or

(b) (i) reacting a compound of formula **Ia** or **Ib** with a compound having the formula Y-R"-YProt, and

(ii) converting YProt in the reaction product from (i) to Y', and

(iii) reacting the product from (ii) with a compound of formula **Ia** or **Ib** to yield a compound of formula **IIIa** or **IIIb**;

wherein:

Y, Y' are independently selected from OH, I, Br, Cl, mesylate or tosylate;  
YProt is a precursor to Y' or a chemically protected form of Y' having a protecting group that is orthogonal to R<sup>10</sup> and R<sup>11</sup>.

30. Canceled.

31. (Currently amended) A method according to claim 29 30, wherein Y and Y' are I.

32. (Currently amended) A method according to claim 29 30, wherein Y is OH and YProt is O-benzyl.